Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

All currently pending claims are listed below for the convenience of the Examiner. Please amend claims 1, 6, 9, 11, and 14, as follows:

1. (Currently amended) A method for image processing comprising:

obtaining stereo data based on input image sequences, including obtaining stereo data based on input image sequences of varying facial expressions;

building a three-dimensional (3D) model using the obtained stereo data; and

tracking a monocular image sequence using the built 3D model.

2. (Canceled) ~~The method of claim 1, wherein the obtaining of the stereo data includes obtaining stereo data based on input image sequences of varying facial expressions.~~

3. (Original) The method of claim 1, wherein the building of the 3D model includes processing the obtained stereo data using a Principal Component Analysis (PCA).

4. (Original) The method of claim 3, wherein the processed stereo data using PCA allows the 3D model to approximate a generic shape as a linear combination of shape basis vectors.

5. (Original) The method of claim 1, wherein the tracking of the monocular image sequence includes tracking of a monocular image sequence of facial deformations using the built 3D model.

6. (Currently amended) A computing system comprising:

an input unit to obtain stereo data based on input image sequences of varying facial expressions; and

a processing unit to build a three-dimensional (3D) model using the obtained stereo data and to track a monocular image sequence using the built 3D model.

41

7. (Canceled) ~~The computing system of claim 6, wherein the input unit is to obtain the stereo data based on input image sequences of varying facial expressions.~~

8. (Original) The computing system of claim 6, wherein the processor is to process the obtained stereo data using a Principal Component Analysis (PCA).

9. (Currently amended) The computing system of claim 8~~6~~, wherein the processor is to approximate a generic shape as a linear combination of shape base vectors based on the PCA processed stereo data.

10. (Original) The computing system of claim 6, wherein the processor is to track a monocular image sequence of facial deformations using the built 3D model.

11. (Currently amended) A machine-readable medium providing instructions, which if executed by a processor, causes the processor to perform an operation comprising:

obtaining stereo data based on input image sequences, including obtaining stereo data based on input image sequences of varying facial expressions;

building a three-dimensional (3D) model using the obtained stereo data; and

tracking a monocular image sequence using the built 3D model.

12. (Canceled) ~~The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, causes the processor to perform an operation comprising:~~

~~obtaining stereo data based on input image sequences of varying facial expressions.~~

13. The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, causes the processor to perform an operation comprising:

processing the obtained stereo data using a Principal Component Analysis (PCA).

14. (Currently amended) The machine-readable medium of claim 13~~1~~, further providing instructions, which if executed by the processor, causes the processor to perform an operation comprising:

approximating a generic shape as a linear combination of shape basis vectors based on the processed stereo data using PCA.

15. (Original) The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, causes the processor to perform an operation comprising:

tracking of a monocular image sequence of facial deformations using the built 3D model.